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PROTECTION OF RUSTIC FINISHES AGAINST MOLD ATTACKS

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Many owners of log cabins and other types of rustic buildings apply various types of transparent finishes in order to preserve the new appearance of freshly peeled logs or sawn lumber. These finishes, consisting largely of varnishes, linseed oil, or various types of wood sealers, provide a relatively effective protection against the weathering and graying that normally occur on the exterior surfaces of such structures when left unfinished.

Unless some effective preservative is added, however, the foregoing finishes do not provide any protection against molds that develop on the surface of the finish in the damper locations. Such attacks frequently can be observed on the last several courses of logs or siding above the foundation. They usually detract more from the appearance of the building than other types of discoloration because of their pronounced black color.

A convenient and practical method for preventing such attacks is through the use of boiled linseed oil to which has been added a sufficient amount of pentachlorophenol to give a 5-percent concentration. 1/ Boiled linseed oil, which in itself is a relatively effective water repellent, is also a good solvent and carrier of the preservative. Either pure pentachlorophenol crystals or the concentrated solution can be used. The economics of the former are best realized when a large volume is required. The concentrated solutions are available in concentrates of 1 to 5 or 1 to 10, and can be obtained in quantities of 5 or 55 gallons. The ratios refer to the number of parts of oil that must be added to each part of the concentrate to obtain 5-percent solution. Complete mixing instructions are provided by the various suppliers. 2/

1/ Preservative wood sealers that are sold under proprietary brand names may be used instead of linseed oil. Such products may be somewhat more convenient to use but generally cost a little more and are no more effective.

2/ Suppliers of pentachlorophenol are: A. D. Chapman & Co., Inc., 333 N. Michigan Ave., Chicago 1, Ill., and branch at Terminal Sales Bldg., Portland 5, Ore.; Dow Chemical Co., Midland, Mich.; I. F. Laucks, Inc., 911 Western Ave., Seattle 4, Wash.; Monsanto Chemical Co., 1700 S. Second St., St. Louis 4, Mo.; Wood Treating Chemicals Co., 5137 Southwest Ave., St. Louis 10, Mo., and branch at 1015 American Bank Bldg., Portland, Ore.

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The solution might be most effectively sprayed on by use of a regular garden spray. The log surfaces or siding should be flooded with the solution. The operation should be repeated two or three times or until there is no longer any rapid absorption.

On surfaces where the mold is already established it first should be removed. This frequently can be accomplished by means of a wire brush or steel wool. A thorough scrubbing with hot water and a good cleaner has also been found to be effective. When water is used some time should elapse before applying the finish in order to allow the surface to dry.

When good retentions are obtained the treatment as described should provide protection against molds for 2 to 3 years. A good practice, however, is to inspect the buildings annually and repeat the treatment at shorter intervals if necessary. Sunny exposures may require more frequent treatments to prevent discoloration from weathering.

Reference:
Making Log Cabins Endure, Report No. R982, Forest Products Laboratory. 1946.